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REPORT AS TO URBAN DISTRICT.

HEALTH DEPARTMENT,
GUILDHALL, ROCHESTER,

February 24th, 1903.

TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE.

GENTLEMEN,

I have the honour to lay before you the following Report of the Sanitary condition of your District for the year 1902.

I beg to remain, Gentlemen,

Your obedient Servant,

SIDNEY PRITCHETT.

POPULATION.

The population of the District according to the Census of 1901, was 30,590, made up as follows:—

Medway locality, 17,598.

Strood locality, 12,992.

The population at the middle of 1902 calculated logarithmically is 31,104, being 17,893 for Medway, and 13,211 for Strood. In other words, the population has increased since the last computation by 514 for the whole district, by 295 for Medway, and by 209 for Strood.

The natural increase of population by excess of births over deaths during the year amounted to 382.

Vital Statistics of the whole District, and of its component localities, are set forth in the Tables appended to this Report.

The Death Rate for the year was 15·9 per thousand.

The Birth Rate was 28·2 per thousand.

The Zymotic Death Rate was 1·8 per thousand.

The Infant Mortality, per 1,000 births registered, was 144·6.

The following are the Rates per 1,000 for England and Wales for the year 1902:—

Death (all causes).....	16·3
Birth	28·6
Death (Zymotic)	1·64
Infant Mortality	133

The Death Rate is 1 higher than in 1901, and the same as the average for the last 10 years. But it must be taken into consideration that there have been 9 Deaths from Small-Pox, and no fewer than 29 from accidents as against 12 of the latter in 1901, which is about the average. If allowance is made for these the Death Rate comes down to 15·1.

The following were registered as causes of Deaths of Children under 1 year of age:—

Small-Pox, 1; Measles, 1; Scarlet Fever, 1; Whooping Cough, 2; Diarrhœa, 14; Enteritis, 3; other Septic Diseases, 1; other Tubercular Diseases, 5; Bronchitis, 19; Pneumonia, 13; Venereal Disease, 4; Premature Birth, 20; Heart Disease, 2; Accidents, 4; all other causes, 37; total, 127. This is a large number and gives an Infant Mortality Rate of 144·6 per 1,000 births registered, or 11·6 higher than the same rate for England and Wales. Last year the Infant Mortality Rate was 141·2 for this District. On examination of the causes of death it will be seen that the principal dangers to infants in this district arise from diseases of the digestive tract and of the lungs, no fewer than 49 out of the 127 having succumbed to such diseases. There is no doubt that this state of affairs is largely preventible, the diseases in question depending either on insufficient care or knowledge in the matter of feeding or on similar shortcomings with regard to clothing, warmth and ventilation. The only remedy is Education, and all Charity Nurses, District Visitors and others, who come in contact with young mothers, should be prepared and willing to give advice in this most important matter.

ZYMOTIC DISEASES.

Table shewing number of Deaths for past 10 years.

Year.	Small-Pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Typhoid.	Diarrhœa.	Total.	Death Rate per 1000.
1893	0	8	3	8	2	5	28	54	1'9
1894	0	2	9	16	16	1	6	50	1'7
1895	0	2	1	15	3	1	15	37	1'3
1896	0	24	9	17	2	7	14	73	2'5
1897	0	0	2	26	15	7	34	84	2'9
1898	0	5	3	1	6	5	37	57	1'9
1899	0	19	8	5	17	3	49	101	3'3
1900	0	1	1	3	5	5	28	43	1'4
1901	0	3	1	9	7	10	22	52	1'6
1902	9	12	2	7	8	3	16	57	1'8

In this table the number of Deaths from Small-Pox and from Measles are the salient features. A full account of the Small-Pox outbreak appears later in the Report, and some observations on Measles are also made.

INFECTIOUS DISEASES NOTIFICATION ACT.

The following Notifications were received during the year :—

Parish.	Small-Pox.	Scarlet Fever.	Diphtheria.	Erysipelas.	Puerperal Fever.	Chicken- Pox.	Typhoid.	Total.
Strood & Frindsbury..	16	27	12	10	0	7	18	90
St. Margaret's	18	40	25	14	0	18	15	130
St. Nicholas	2	4	2	1	0	12	1	22
Chatham Intra	1	0	2	0	0	0	2	5
Totals.....	37	71	41	25	0	37	36	247

From this it is seen that the Medway division furnishes 157 notifications, and Strood 90.

The following Table shews from whence the Notifications come, and the average for 10 years :—

	Medway.	Strood.	Total.
1892	81	128	209
1893	167	157	324
1894	190	225	415
1895	101	183	284
1896	152	268	420
1897	198	173	371
1898	175	77	252
1899	154	269	423
1900	80	105	185
1901	135	107	242
Average for Years 1892-1901.	143'3	169'2	312'5
1902	157	90	247

If the notification of Small-pox and Chicken-pox are not included, the figures work out as follows :—

	Medway.	Strood.	Total.
1902	106	67	173

which constitute a record for Strood, and are far below the average for the Medway Division.

SMALL-POX.

During the year 37 cases of Small-pox were notified and in every case the diagnosis was correct, with the exception of one, in which the symptoms were so modified as to make a definite conclusion impossible. The patient, however, was taken into Hospital, and is included in the Statistics.

The cases were all supplied by the working classes, and this I attribute principally to the fact that a large majority of the other classes adopted the precaution of re-vaccination early in the outbreak. A great number of children of all classes submitted to re-vaccination, but working men in the active pursuit of their livings preferred to run the risk of contracting Small-pox, although re-vaccination was urged by all the means in our power. Circulars pointing out the desirability of re-vaccination, giving assurance of the purity of the lymph employed, and worded in clear and temperate language, were delivered by hand at every house in the District; but as before stated the class of population who subsequently supplied the cases of Small-pox did not avail itself to any great extent of the protection offered. I have no means of ascertaining the exact number of persons re-vaccinated, but I am sure there remains a sufficient number of unprotected persons in the District to provide ample pabulum for Small-pox should it appear again.

Immediately the first case was discovered, which was late in 1901, steps were taken to provide an Isolation Hospital, and this was opened on January 6th, 1902, in time for the reception of the third case.

This building is a corrugated iron structure, lined with match-boardings, and is situated at the top of Dark Lane. It is surrounded by an oak fence, and in all respects complies with the requirements of the Local Government Board. At first, provision was made for 6 male and 6 female patients, but this was soon found to be insufficient, and the male ward was enlarged to the capacity of 12 beds. Later, a tent was erected with room for 8 more beds. These provisions have up to the present proved sufficient, the largest number of patients under treatment at any one time having been 23. On the whole the Hospital has worked very well, and the greatest credit is due to the Nurses there employed, who have discharged their unpleasant duties throughout with intelligence and cheerfulness.

The isolation of the patient having been thus secured, provision was made for dealing with the contacts, and a scheme was adopted which is, I believe, taken together with the other measures, the safest, and in the long run, the least expensive, way of dealing with Small-pox yet practised. It consisted in isolating the contacts from each infected house for 16 days on board the Elk, where they were immediately vaccinated and watched for symptoms of Small-pox. 148 contacts were thus quarantined, and 4 of them developed Small-pox and were removed to Hospital. All the foregoing steps were taken immediately on the notification of a case of Small-pox. In every case the patient was removed to Hospital within an hour or two, however late in the day, and no person except a Sanitary Official was permitted to enter or leave the infected house for 16 days, during which time the inmates were on board the Elk, and the house itself was undergoing thorough disinfection of every room. The contacts were generally removed the same day, but if it was too late for this a special constable kept guard over the house until they could be removed the following morning. No great objection was made by the contacts to going on board the Elk, where they were made comfortable, and well-fed. On the contrary, many expressed a liking for the place, and were sorry to leave. During the time they were on board they took frequent carbolic baths, and their clothing was disinfected. The patients' recent clothing and bedding in the infected houses was destroyed in most cases, but many articles were sent to the Steam Disinfector at St. William's Hospital. Every room in each house was sulphur-fumigated two or three times, afterwards sprayed with formalin, and finally freely ventilated with fresh air. We had 16 days in which to do this, so it was done thoroughly. We did not have a second case in any house after disinfection. Of the 37 cases notified 27 were fresh importations of Small-pox into the District, since it could not be shown that they had been in contact with any previous local case. As a rule the source could be ascertained, but in some cases it was untraceable. In my opinion the fact that 27 separate foci of infection only gave rise to 10 more cases is a striking proof of the efficacy of the measures adopted, and in the 10 cases it must be remembered that the patient was infected and the mischief done before the Sanitary Authorities were notified, and could intervene. The re-vaccination of the contacts was usually performed by the Public Vaccinator. In addition to the household contacts on board the "Elk," the Vaccination Officer made inquiries in the neighbourhood of each case, and persuaded as many as he could of those who had probably been in contact, to undergo vaccination. The working of the Vaccination Act, in the face of an outbreak of Small-pox is, in my opinion, not good. It entails what is most important to avoid, loss of time. The Medical Officer of Health receives information of a case of Small-pox, he informs the Vaccination Officer, who finds out as many contacts as he can, and then informs the Public Vaccinator, who proceeds to vaccinate. Often, while this is going on, the contact is incubating Small-pox, and the opportunity is lost. I made a practice of informing the Public Vaccinator at once, either by telephone or special message, and if there were circumstances which prevented his immediate action, frequently vaccinated the contacts myself.

I am sure matters would be smoother and more expeditious if the Public Vaccinator and the Vaccination Officer were Officials of the Sanitary instead of the Poor Law Authority.

Statistics with regard to Small-pox and Vaccination will be found under the heading of St. William's Hospital.

SCARLET FEVER.

Seventy-one cases were notified, and there were two deaths.

Forty-two cases were removed to St. William's Hospital.

Scarlet Fever seems to be growing a much milder disease than it was a few years ago, its death rate throughout the country being less than that of either Measles or Whooping Cough.

MEASLES AND WHOOPING COUGH.

These two diseases accounted for 20 deaths in the District in 1902, or more than Small-pox, Diphtheria, and Typhoid Fever combined. Both are highly infectious, and neither is at present a notifiable disease. A vast majority of the cases occur in children under the ages of 5 years, and in my opinion the diseases are usually contracted at school.

I am not prepared to make any recommendation at present with regard to this, other than that it might be of service to issue to the masters and teachers of every school a note of instruction with regard to the early symptoms of these diseases, and of warning to be on the alert for such symptoms. How much real benefit a child under the age of 5 gets from attending school is a matter of opinion.

It was necessary to close St. Matthew's Schools, Borstal, from May 5th to June 2nd, on account of Measles.

DIPHTHERIA.

Forty-one cases were notified, and there were 7 deaths.

Twenty-eight cases were removed to St. William's Hospital.

Last year there were 57 notifications and 9 deaths.

TYPHOID FEVER.

Thirty-six cases were notified, and there were 3 deaths.

Twenty-two cases were removed to St. William's Hospital.

Last year there were 99 cases, and 10 deaths. Five cases could reasonably be traced to the consumption of shellfish.

DIARRHOEA.

There were 16 deaths, which is the lowest for 6 years. It would be gratifying to be able to attribute this to a better knowledge of the rules of infant feeding amongst mothers; as it is, it must be put down to the cold summer.

PHTHISIS, OR CONSUMPTION.

There were 35 deaths, or 7 per cent. of all the deaths in the year; or in other words, one death in about every 13 was caused by Phthisis.

This is an infectious disease to which a great deal of consideration and discussion has been devoted during the past two or three years. Up to the present time, in this District, not the slightest attempt has been made to check the spread of a disease which is, of all the communicable diseases, by far the most fatal. Obviously it is impossible to deal with any infectious disease unless it be known where the patient lives. The first thing, therefore, is to make the disease notifiable, and this is a course I beg to strongly recommend. The consideration of the steps to be afterwards taken, as they involve a good deal, might be left for a meeting of your Committee.

CHICKEN-POX.

This disease was made notifiable for 6 months.

Thirty-seven cases were notified.

It was thought that the notification of cases of Chicken-pox might be of service in combatting the Small-pox outbreak. At the end of six months, however, it could not be discovered that any good had come of the notification, and the practice was therefore discontinued.

HORSES AND CATTLE.

Mr. E. Ebbetts, the City Veterinary Inspector, reports that during the year the District was particularly free from contagious diseases. There have been no cases of Swine Fever, Rabies, or Foot and Mouth disease. On October 11th there was an outbreak of Glanders in Canal Road. Three horses were slaughtered, and no further cases arose.

FACTORY AND WORKSHOP ACT, 1901.

BAKEHOUSES.—There are 25 Bakehouses in the District, none of which are underground.

They have been inspected several times during the year, and at first were found to be mostly in a very dirty condition, without, however, any grave Sanitary defects such as direct untrapped connection with drains or close proximity to sleeping rooms.

They have now all been put on an Official Register, and explicit directions given with regard to cleanliness and ventilation. Each bakehouse has been measured and cubed, and a card supplied to be hung therein notifying how many persons may be employed both daytime and overtime.

FACTORIES AND WORKSHOPS.—Fifty have been examined, measured and cubed, and registered. Their Sanitary condition was in most cases fairly good. There was one case of overcrowding. The water closet and urinal accommodation was in all cases satisfactory.

HOME WORK.—Twenty-three premises where out-work is carried on have been examined. Several were found to be in a dirty condition, which has since been rectified. Each employer of labour has received an abstract of the Act, in which he is informed that he should, twice a year, forward to this office a list of his out-workers. In no case has this been complied with, and the out-workers at present ascertained have been discovered by ourselves.

FOOD AND DRUGS ACT.

Analysis performed under the Act during the year.

	Sample Analysed.	Result.	Action Taken.
1	..... Milk	Satisfactory	..... Nil
2	..... „ .....	Unsatisfactory	..... Fined £2
3	..... „ .....	Satisfactory	..... Nil
4	..... „ .....	Unsatisfactory	..... Fined £1 18s.
5	..... „ .....	Satisfactory	..... Nil
6 „	„ „
7 „	„ „
8	..... Butter	„ „
9	..... Cheese	„ „
10	..... Jam	„ „
11	..... Lard	„ „
12	..... Butter	„ „
13	..... Sugar	„ „
14	..... Jam	„ „
15	..... Gin	„ „
16	..... Brandy	„ „
17	..... Whisky	„ „
18	..... Rum	„ „
19	..... Olive Oil	„ „
20	..... Glycerine	„ „
21	..... Yellow Bees' Wax	„ „
22	..... Seidlitz Powders	„ „
23	..... Seidlitz Powders	„ „
24	..... Cream of Tartar	„ „
25	..... Spirits of Ether	„ „
26	..... Liniment of Camphor	„ „
27	..... Butter	„ „
28	..... Lard	„ „
29	..... Dutch Cheese	„ „
30	..... Brown Sugar	„ „
31	..... Cream of Tartar	„ „
32	..... Glycerine	„ „
33	..... Spirits of Ether	„ „
34	..... Liniment of Camphor	„ „

DAIRIES, COWSHEDS, AND MILKSHOPS.

Up to the present no Official Register has been kept of the Dairies and Cowsheds. They have been inspected from time to time, and attention has been given to cleanliness, drainage, and removal of manure. They are now undergoing thorough examination, and are being measured and cubed in order to fix the maximum number of cows which are to be allowed to use each shed, after which they will be put in the Register, and required to observe the Bye-Laws in all respects.

For the first time a Register of Milkshops has been made. Every person desiring to sell milk by retail from a shop is required to make application, after which his premises are visited, and permission given or refused according as the premises are considered suitable or the reverse. Should the permission be granted, the person is required to keep his milk in a suitable place, and to keep the vessel in which it is contained covered. He is supplied with a register plate, which is fixed over his shop door. There are 43 of such Milkshops in the District, in my opinion far too many, and they have all been visited several times during the year.

SLAUGHTER HOUSES.

No Official Register of these has been kept up to the present. They have received a great deal of attention during the year, and much has been done to improve their condition. Much, however, remains to be done, as they are in most cases both structurally, and from their location, unfit for the purposes to which they are put. If it is decided to establish a public Abbatoir a moderate amount of alterations and repairs will enable them to carry on for a time, otherwise the changes will have to be very considerable. They are at present being put on a proper Register.

MEAT DESTROYED.

The following Meat was confiscated and destroyed during the Year, under the order of a Magistrate, for the reasons assigned.

Carcase of Cow	.....	Tuberculosis
Liver	.....	Flukes
Carcase of Ox	.....	Tuberculosis
Carcase of Ox	.....	Tuberculosis
Carcase of Ox	.....	Tuberculosis
1 Quarter of Beef	.....	Tuberculosis

ELEMENTARY SCHOOLS.

All these have been duly fumigated as in previous years.

LOCAL RAINFALL IN 1902.

The following information was obtained at the Strood Waterworks, situated in the District:—

Month.	Total Depth- Inches.	Greatest fall in 24 hours.		Number of days on which '01 or more fell.			
		Depth.	Date.				
January.....	'59	.....	'17	.....	27	.....	9
February	1'12	.....	'17	.....	22 & 24	.....	11
March	1'13	.....	'56	.....	14	.....	8
April	'38	.....	'09	.....	22	.....	10
May	2'31	.....	'31	.....	17	.....	25
June	2'24	.....	'51	.....	13	.....	19
July	1'60	.....	'33	.....	1	.....	13
August	2'40	.....	'48	.....	16 & 18	.....	18
September ..	'85	.....	'26	.....	11	.....	8
October.....	1'47	.....	'31	.....	15	.....	14
November ..	1'43	.....	'54	.....	30	.....	11
December....	1'13	.....	'40	.....	17	.....	13
Total....	16'65						159

HOUSE TO HOUSE INSPECTION.

	1901.			1902.			Total for 1901 & 1902.	
	Medway.	Strood.	Total.	Medway.	Strood.	Total.		
Inspected	176	278	454	623	187	810	..	1264
Re-inspected	112	596	708	736	132	868	..	1576
In order	103	56	159	340	102	442	..	601
Defective	73	222	295	283	85	368	..	663
Remedied	73	222	295	220	60	280	..	575
Outstanding				63	25	88	..	88
First Notices & Letters	108	334	442	183	61	244	..	686
Statutory Notices	0	89	89	62	31	93	..	182

HOUSING OF WORKING CLASSES ACT, 1890.


The following premises have been rendered habitable during the year:—

Holden's Cottages.	Delce Road, 54 to 80.	Willis Row.
Denning's Cottages.	Roffway's Court.	Charles Street, 22 to 36.
Garden Row.	The Orchard.	

The following have been condemned and undergone demolition:—

Burrell's Cottages.	Welch's Court.	Bee Hive Court.
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There is a large number of houses in the District which are barely fit for human habitation, some of which are the property of the Corporation. It is very desirable to gradually close these houses and pull them down. The greatest difficulty in the way of this is the disposal of the inmates. Sooner or later the City will have to consider the question of providing house accommodation for the poorer classes, as a municipal undertaking.



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NUISANCES REMEDIED DURING THE YEAR.

Houses without drains, or reconstructed	85
„ provided with new W.C.'s.....	2
„ „ ash pits or dust bins.....	16
„ „ shooting or repaired.....	73
„ cleansed and whitewashed	37
„ fumigated	148
„ over-crowded	10
„ unfit for habitation	7
House roofs repaired	62
„ refuse removed on complaint	14
Drains, trapped and ventilated	38
„ repaired and cleansed.....	213
„ stoppage in	120
„ defective traps removed and trapped stoneware gullies fixed	258
Water closets, substituted for privies	34
„ provided with water supply and flushing apparatus.....	52
„ repaired and cleansed.....	30
„ defective water fittings to	147
Privies, dangerous and defective structure	82
„ defective pits	80
„ constructed	6
Cesspools, insufficient accommodation	12
„ defective.....	49
„ unventilated	74
„ constructed	30
Earth closets, defective	0
Soil-pipes and drains ventilated	28
Old pan closets with container and D trap removed	8
Urinals altered and repaired	12
Sink and other waste pipes disconnected from drains	57
Stables drained and paved	33
Yards of dwellings provided with new concrete paving or repaired	99
„ and premises in dirty condition	6
Manure removed	11
„ pits constructed	3
Cowsheds, bakehouses and slaughter-houses cleansed	21
Remove pigs, poultry and other animals	24
Total	1981

GENERAL SANITARY CONDITION OF THE DISTRICT.

This is as good as can be expected under the existing conditions. The sewage still accumulates in cesspools, most of which are unventilated, until they overflow, when it is removed by a process of pumping and carted away in tanks to some neighbouring field. Sometimes the sludge remaining at the bottom of the cesspools is considerable enough to require removal, but usually it is surprising to see how little there is, the process of disintegration having been practically the same as happens in the Septic Tank or Bacterial method of disposing of sewage.

The removal of household refuse is now conducted by the Corporation, and the collection of the same is daily in the High Street, and on alternate days in other parts of the District. This is a great improvement on the old system, which was by contract, and in open carts calling, on an average, once a week. The Sanitary Bins provided by the householders are remarkable in their variety. Wooden buckets, tin buckets, old baths, egg boxes, old coal scuttles, and other similar receptacles are frequently to be seen outside the houses waiting for the wagons.

The following figures, compiled from the House-to-House Inspection, are of interest in this connection :—

Houses with Galvanized Iron Bins	Medway 454	.....	Strood 220
Houses with nondescript receptacles	Medway 345	.....	Strood 245

In my opinion the owner of every house ought to provide a suitable Galvanized Iron Bin with handles and cover.

After the refuse has been collected it is taken to a dumping ground situated near the centre of the District between the river and the High Street, and there burnt in the open air. It is easy to smell these operations at a considerable distance, if the wind happens to blow in the right direction.

Two of the most pressing needs of the District are Main Drainage and a Refuse Destructor.

ST. WILLIAM'S HOSPITAL AND SMALL-POX ISOLATION HOSPITAL.

Three hundred and four cases were admitted during the year, being eighty-two more than in 1901. The average admission for the last ten years is 279·9.

Rochester furnished 129 cases, Chatham 174, and Hoo 1.

ROCHESTER.

Ages.	Scarlet Fever.	Diphtheria.	Typhoid.	Small-pox.	Total.
Under 5	8	6	0	1	15
5 and upwards	34	22	22	36	114

CHATHAM.

Under 5	16	5	0	4	25
5 and upwards	32	14	16	87	149
Totals....	90	47	38	128	303

The Hoo case is not included in the figures. It was one of Scarlet Fever and recovered.

The mortality was as follows :—

Scarlet Fever	....	3	or	3·3 per cent.
Diphtheria	....	3	„	6·3 per cent.
Typhoid	....	6	„	15·7 per cent.
Small-pox	....	24	„	18·7 per cent.

These figures, except for Small-pox, are all very low and compare favourably with the average rates of mortality.

SMALL POX AND VACCINATION.

Three cases were sent in from Chatham which turned out not to be Small-pox. One was Chicken-pox, one was Syphilis, and the third was an eruption of small boils. These patients were vaccinated on admission and did not contract Small-pox. For the purposes of the following Vaccination statistics two cases, which were admitted late in 1901, are included, so the total number of cases of Small-pox to come under review is 127.

	Number.		Discrete		Confluent.		Cured.		Died.
Vaccinated in Infancy ..	102	....	89	....	13	....	91	....	11
Re-vaccinated	1	....	1	....		....	1	....
Never Vaccinated	24	....	5	....	19	....	11	....	13

Thus only one person who had undergone re-vaccination contracted Small-pox, and this was so mild as to leave it uncertain whether or not it really was Small-pox.

Of the patients who had been vaccinated in infancy

87·2 per cent. had discrete or mild attacks.

12·7 per cent. had confluent or grave attacks.

10·7 per cent. died.

Of the patients who had never been vaccinated

20·8 per cent. had discrete attacks.

79·1 per cent. had confluent attacks.

54·1 per cent. died.

The following age table is instructive since it shews that the further one gets from the age of vaccination, which is infancy, the greater is the liability to contract Small-pox.

Cases of Small-pox, vaccinated in infancy but not since.

AGES.

Under 1	....	1 to 5	....	5 to 15	....	15 to 25	....	25 to 65.
0		0		3		31		68

A child was born in a ward at the Hospital, vaccinated two hours afterwards, and did not contract Small-pox.

All doctors, nurses, porters and others handling the Small-pox cases were re-vaccinated. Not one of them contracted the disease.

TYPHOID FEVER AND DIPHTHERIA.

With the exception of a few at the beginning of the year all the Typhoid cases have been submitted to Widal's agglutination test, with the result that five were found to be other than supposed, and their subsequent clinical course bore out the alteration in diagnosis.

Nearly all the Diphtheria cases were also examined bacteriologically, and six were found to lack confirmation by this means. They were accordingly discharged at an early date.

With regard to Diphtheria, the most powerful means of treatment is beyond doubt, the Diphtheria Antitoxic Serum. It is now given in the Hospital in much larger doses than was formerly the case, and with the best results. No ill-effects beyond a fugitive nettle rash ever appear to follow its administration. The earlier it is given the better, and even in sore throats which present no membrane, if there is the slightest suspicion of Diphtheria it should be freely employed. It is the opinion of some authorities that with this remedy in our hands no case of Diphtheria need ever be lost, provided the treatment is begun soon enough. Unfortunately, doctors frequently do not get called to the cases until they are well advanced.

TABLE I. ROCHESTER.—For Whole District.

YEAR.	Population esti- mated to middle of each year.	No. of Births.	Birth Rate.*	Deaths under 1 year.	Rate per 1,000 Births Registered.	Total Deaths at all ages.	Total Death Rate.*	Deaths in Public Institutions.	Deaths of Non- residents registered in District.	Deaths of Resi- dents registered beyond District.	Deaths at all Ages. Nett.	Death Rate* at all Ages. Nett.
1892 ..	26720	813	30.4	112	137.7	484	18.1	118	72	14	426	15.9
1893 ..	27150	804	29.6	105	130	497	18.3	137	85	14	426	15.6
1894 ..	27580	787	28.5	113	143	517	18.7	124	85	10	442	16.0
1895 ..	28010	792	28.2	124	156	488	17.4	117	76	16	428	15.2
1896 ..	28440	818	28.7	112	136	564	19.8	161	112	11	463	16.2
1897 ..	28870	794	27.5	117	147	481	16.6	133	90	14	405	14.0
1898 ..	29300	800	27.3	145	182	638	21.7	191	151	22	509	17.3
1899 ..	29730	809	27.2	161	199	642	21.5	194	113	21	550	18.4
1900 ..	30160	813	26.9	136	167	582	19.2	182	131	18	469	15.5
1901 ..	30590	864	28.2	122	141.2	556	18.1	141	107	17	466	14.9
Averages for years 1892-1901 }	28655	809.4	28.2	124.7	153.8	544.9	18.9	149.8	102.2	15.7	458.4	15.9
1902 ..	31104	878	28.2	127	144.6	620	19.9	209	135	11	496	15.9

* Rates calculated per 1,000 of estimated population.

By the term "Non-residents" is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.

At Census of 1901 the total population at all ages was 30,590; Number of inhabited houses, 6,236; Average number of persons per house, 4.8.

Area of District in acres (exclusive of area covered by water), 2,715.

TABLE II. ROCHESTER DISTRICT.

NAMES OF LOCALITIES.		WHOLE DISTRICT.				MEDWAY.				STROOD.			
YEAR.		Population esti- mated to middle of each Year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each Year.	Births registered.	Deaths at all Ages.	Deaths under 1 Year.	Population esti- mated to middle of each Year.	Births registered.	Deaths at all Ages.	Deaths under 1 Year.
1892 ..		26719	813	426	112	15804	426	272	49	10915	387	154	63
1893 ..		27148	804	426	105	16003	395	241	43	11145	409	185	62
1894 ..		27577	787	442	113	16202	422	244	57	11375	365	198	56
1895 ..		28006	792	428	124	16401	392	244	47	11605	400	184	77
1896 ..		28435	818	463	112	16600	403	255	50	11835	415	208	62
1897 ..		28864	794	405	117	16799	405	243	68	12065	389	162	49
1898 ..		29293	800	509	145	16998	402	287	66	12295	398	222	79
1899 ..		29722	809	550	161	17197	415	309	79	12525	394	241	82
1900 ..		30151	813	469	136	17396	393	262	71	12755	420	207	65
1901 ..		30590	864	466	121	17598	436	253	47	12992	428	213	74
Averages of Years 1892 to 1901. }		28650.5	809.4	458.4	124.6	16699.8	408.9	261.0	57.7	11950.7	400.5	197.4	66.9
1902 ..		31104	878	496	127	17893	460	289	63	13211	418	207	64

TABLE III.

ROCHESTER DISTRICT.

Cases of Infectious Disease notified during the Year 1902.

Notifiable Disease.	Cases Notified in Whole District.							Total Cases Notified in each Locality.		No. of Cases Removed to Hospital.	
	At all ages.	Under 1 Year.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.	MEDWAY.	STROOD.	MEDWAY. (H)	STROOD.
Small-pox	37	1			14	22		21	16	21	16
Cholera											
Diphtheria	41	1	13	19	5	3		29	12	21	7
Membranous Croup											
Erysipelas	25	2	1	2	2	15	3	15	10		
Scarlet Fever	71	2	15	42	9	3		44	27	27	15
Enteric Fever	36		1	7	12	15	1	18	18	9	13
Chicken Pox (six months only) ..	37	1	17	18	1			30	7		
Totals	247	7	47	88	43	58	4	157	90	78	51

TABLE IV.

ROCHESTER DISTRICT.

Causes of, and Ages at, Death during Year 1902.

Causes of Death.					Deaths in whole District at Subjoined Ages							Deaths in Localities (at all ages).		Deaths in Public Institutions.
					All ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Medway.	Strood.	
Small-pox					9	1			1	7		5	4	24
Measles					12	1	9	2				8	4	3
Scarlet fever					2	1		1				1	1	1
Whooping-cough					8	2	6					5	3	
Diphtheria & membranous croup ..					7		4	2	1			3	4	6
Enteric Fever					3			1	1	1		2	1	6
Epidemic Influenza					4					3	1	2	2	1
Diarrhoea					16	14	1				1	3	13	4
Enteritis					5	3	2					2	3	1
Other septic diseases					5	1		1		2	1	4	1	9
Phthisis					35		1	2	7	25		24	11	5
Other tubercular diseases					17	5	2	5	2	3		14	3	2
Cancer, malignant disease					23					16	7	16	7	10
Bronchitis					56	19	1	1		12	23	32	24	11
Pneumonia					49	13	21		2	12	1	25	24	10
Other diseases of Respiratory organs					1						1		1	2
Alcoholism, Cirrhosis of Liver ..					7					4	3	4	3	2
Venereal diseases					4	4						1	3	1
Premature births					20	20						9	11	
Diseases and accidents of parturition					2				2			1	1	1
Heart diseases					40	2	2	2	1	17	16	20	20	14
Accidents					29	4	1	1	6	16	1	20	9	33
Suicides					1					1		1		1
Apoplexy					22					9	13	12	10	2
All other causes					119	37	8	2	2	25	45	75	44	60
All causes					496	127	58	20	25	153	113	289	207	209



REPORT AS TO PORT SANITARY DISTRICT.

HEALTH DEPARTMENT,
GUILDHALL, ROCHESTER.

TO THE CHAIRMAN AND MEMBERS OF THE PORT SANITARY COMMITTEE.

GENTLEMEN,

I have the honour to lay before you a Report of the Sanitary Work performed during the year 1902.

The Vessels entering the Port were as follows:—

FOREIGN TRADE:—

British Steam	....	....	47	Sailing	....	....	82
Foreign Steam	....	....	52	Sailing	....	....	74
			99				156

COASTING TRADE:—

British Steam	....	....	561	Sailing	....	....	220
Foreign Steam	....	....	12	Sailing	....	....	4
			573				224

Total Steam 672. Total Sailing 380.

The following were also boarded by the Sanitary Inspector:—

RIVER TRADERS:—

Barges	....	....	....	....	....	2080
Canal Boats	....	....	....	....	....	322
Lighters	....	....	....	....	....	43
Fishing Boats	....	....	....	....	....	18
Water Boat	....	....	....	....	....	1
						2464

Total number of vessels inspected 3516
In 1901 the total number was 3124

NUMBER AND NATIONALITY OF VESSELS:—

British, 3374; Norwegian, 54; Danish, 23; German, 20; Swedish, 14; Russian, 12; Dutch, 11; French, 8; total, 3516.

CANAL BOATS ACT, 1884.

NAME AND ADDRESS OF INSPECTOR:—HENRY EVANS, LOVE LANE, ROCHESTER.

Remuneration £4 per annum.

The Inspector is on the river daily, and overhauls the boats when he comes across them. These boats are chiefly employed in carrying coals from ship to wharf in the Medway River, and very seldom leave the District.

No boats have been detained during the year. Two, however, had been in contact with Small-pox, and required fumigating and otherwise disinfecting. This was done while they were lying up.

Number of new boats registered	..	..	..	..	0
Number re-registered owing to structural alteration	..	..	..	..	0
Number re-registered for other reasons	..	..	..	..	2
Number of boats registered at December 31st	..	..	..	..	256
Number of women on boats inspected	..	..	..	..	5
Number of children between 5 and 12	..	..	..	..	4
Number of children of 3 years and under	..	..	..	..	6
Number of boats inspected	..	..	..	..	322
Number conforming to acts and regulations	..	..	..	..	249
Number with one or more infringements	..	..	..	..	73
Total number of infringements	..	..	..	..	115
Number of infringements remedied	..	..	..	..	115

CLASSIFIED LIST OF INFRINGEMENTS.

Absence of Certificate. Act 77, Sec. 3	..	..	..	..	2
Certificate not identifying owner with boat..	..	..	..	..	2
Marking. Act 77, Sec. 3	..	..	..	..	9
Cleanliness. Reg. 11	..	..	..	..	63
Painting. Reg. 9	..	..	..	..	13
Lights and Ventilation. Reg. 3	..	..	..	..	2
Dilapidated. Reg. 11	..	..	..	..	5
Defective floors and bulk heads	..	..	..	..	4
Bilges to cleanse	..	..	..	..	5
Sleeping berths to limewash	..	..	..	..	6
Defective skylights and scuttles	..	..	..	..	3
No proper water vessel	..	..	..	..	1

GENERAL SANITARY WORK OF THE PORT.

VESSELS FUMIGATED AND DISINFECTED ON ACCOUNT OF SMALL-POX.

February 21st.—Barge "Annie and Alice."—Mate removed to Hospital suffering from Small-pox. Bed, pillows, and blankets burnt, other clothes sterilized. Cabins fumigated with sulphur, and afterwards washed with dilute carbolic acid. Bilges disinfected with perchloride of mercury. Drinking water tanks, cooking and drinking utensils washed with permanganate of potash.

March 26th.—Barge "Lord Morton."—Captain removed to Small-pox Hospital. Barge treated in above manner.

April 3rd.—Mate removed to Small-pox Hospital from barge "John." Barge treated as above.

April 11th.—Barge "Amy."—Captain removed to Small-pox Hospital. Barge treated as above.

April 16th.—Barge "Jubilee."—Mate removed to Hospital. Barge treated as above.

June 12th.—Barge "Company."—Mate removed. Barge treated as above.

June 16th.—Barge "Minoredosa."—Captain removed. Barge treated as above.

August 4th.—Barge "Ella Vickers."—Mate removed. Barge treated as above.

October 20th.—Barge "William and Herbert."—Captain's wife removed. Bed, bedding, clothes, &c., sterilized.

The Police Ship at Chatham Dockyard was fumigated and disinfected throughout.

The following table shews the number of notices served by the Port Sanitary Inspector, during the past year, on vessels other than Canal Boats, and the Nuisances met and dealt with.

Dirty cabins or forecastles to cleanse	..	..	..	..	107
" " paint or limewash			..	..	25
Defective light in cabins or forecastles	..	..	..	..	6
" ventilation " " "	..	..	..	..	8
" " of holds	..	..	..	..	2
Leaky decks, causing wet berths	..	..	..	..	12
Drinking water casks or tanks to cleanse	..	..	..	..	41
Defective bulkheads, allowing effluvia from cargo to enter cabin or fore-castle					9
Insufficient sleeping accommodation	..	..	..	..	1
" water storage	..	..	..	..	3
To provide stoves for cabin or fore-castle	..	..	..	..	2
To cleanse hammocks or bedding	..	..	..	..	7
To remove ship's stores from crew space	..	..	..	..	9
" paint lockers from fore-castle	..	..	..	..	2
W.C.'s to cleanse and disinfect	..	..	..	..	66
Peaks and lazarettes to cleanse and limewash	..	..	..	..	7
Side scuttles and prisms to refit	..	..	..	..	37
Bilges to cleanse and disinfect	..	..	..	..	19
Iron decks over berths to line	..	..	..	..	6
Defective floors in cabins or forecastles	..	..	..	..	11
Hawse pipes leaky in forecastles	..	..	..	..	6
Food cupboards to cleanse and limewash	..	..	..	..	14
Sleeping berths to paint or limewash	..	..	..	..	10
Defective W.C.'s	..	..	..	..	6
Cable stage to limewash	..	..	..	..	12
Harness casks to cleanse	..	..	..	..	3
Bow lockers to cleanse and limewash	..	..	..	..	4
Dirty old clothes destroyed	..	..	..	..	3 lots
Defective scuppers in fore-castle	..	..	..	..	4
Vessels fumigated for Small-pox	..	..	..	..	10
Dilapidated	..	..	..	..	3
Defective skylights	..	..	..	..	25
Old beds destroyed	..	..	..	..	15

All the notices except five were complied with. These five vessels left the Port before they could be revisited.

On February 12th the Danish s.s. "Svend" arrived from the River Plate, a cholera infected Port. The vessel was disinfected throughout, her drinking water tanks emptied and cleansed, and visited every day.

Ten cases of sickness came under notice on board vessels in the river. In each case a private doctor was advised. The cases were:—Influenzal cold, 2; Rheumatism, 6; Ulcers, 1; Accident, 1.

There was no infectious disease other than the Small-pox above-mentioned.

The "Elk" proved of the greatest service in housing the Small-pox contacts, of which there were 148

The Medical Inspection at Sheerness has improved ; 200 vessels were inspected there, and 55 for various reasons were not.

I beg to remain, Gentlemen,

Your obedient Servant,

SIDNEY PRITCHETT.

